

The Coastal Plainer

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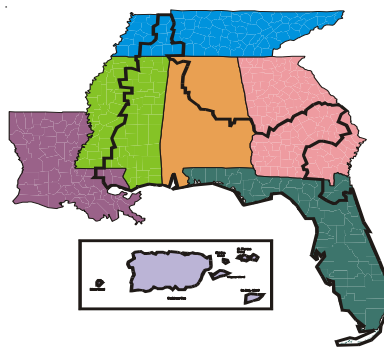
Message From The MO-Leader's Desk

By Charles Love, State Soil Scientist/
MO-15 Team Leader

Greetings! Summer is rapidly approaching, and we are gearing up for the last portion of various field reviews, meetings, training sessions, SSURGO certification activities, and other activities for the fiscal year. The two topics I would like to visit with you about in this article are Contracting Officers' Technical Representatives (COTR) and the MO-15 Water Table Special Study, which is using new technologies.

I would like to introduce you to the first group of soil scientists that have received certification as a Level 1 COTR within MO-15 Region (fig.1, following page). These individuals are appointed to serve as COTR for contracting soil survey activities (map compilation and field mapping) to Technical Service Providers and perhaps through competitive sourcing efforts. We have been told that we may be the first in NRCS in the country to establish these soil scientist collateral COTR positions.

MLRA Soil Survey
Region #15



What are some of the COTRs key responsibilities, you may ask?

COTRs are primarily responsible for conducting quality assurance reviews and summaries, monitoring performance to ensure adherence to performance schedules, preparing and receiving reports and proposed change orders, monitoring technical adequacy of the work, and preparing final performance reports.

Our COTRs will receive the formal training course entitled "Contracting Basics for COTRs" during the week of June 16-19, 2003, in Auburn. They will be among 25 NRCS employees from various positions (Engineers, Resource Conservationist, etc.,) receiving this type of formal training.

What will the COTRs learn about in this training?

- The key elements and features of a contract,
- General knowledge about how a contract works,
- Various types of government contracts,
- The administration of key terms and conditions of a contract,
- The appropriate role of the COTR,
- The advisory and monitoring responsibilities of the COTR,
- The performance of other duties as assigned by the Contracting Officer, and

Continued on page 2

In This Issue:

Message From The MO-Leader's Desk	1
About Me	3
MLRAs 122/128 Team	4
Alabama Hosts Work Planning Conference	5
Two Update Teams Come Together for a Common Cause	6
National Soil Judging Championship	7
Going Digital	8
Editor's Note	8

Love, continued from page 1

- How to avoid possible conflicts of interest.

This basic course will lay the groundwork for future procurement training to help the COTRs achieve their Level II certification, if needed.

I believe that if we find ourselves contracting more and more soil mapping and map compilation then we will need more and more soil scientists that are certified COTRs. We will need them to help maintain quality control during the contracting processes. You may want to work with your State Contracting Officer to identify those individuals that have the qualifications to serve as COTRs on your soil teams.



Figure 2.—Water-level logger WL15, submersible pressure transducer and data logger combination.



Figure 1.— Contracting Officers' Technical Representatives. From left to right: Milton Tuck, resource soil scientist; Richard Zellemer, GIS/soil business specialist; George Martin, soil data quality specialist; Bobby Fox, resource soil scientist; Kenneth Johnson, resource soil scientist; and Charles Love, State Soil Scientist/MO-15 Team Leader. All of these employees are in Alabama in the MO-15 region.

Good News! We are moving forward with a Water Table Special Study, using electronic water-data loggers (new technology devices) for key soils in MO-15. We plan to purchase 100 electronic water-level loggers to be installed in soils in various landform positions.

There is a great need to develop defensible and consistent NASIS data regarding hydric soils, soil moisture status, and other water-related properties for Region 15 soils. For example, at this time in MO-15 we do not have a good collection of water table data to support the development of the soil moisture status criteria to populate NASIS. To achieve this goal, we need more

complete and longer term water table data. Currently, there are noticeable inconsistencies in listed drainage class and soil moisture status between soils with similar parent materials, estimated saturation depths, and saturation duration. These inconsistencies may have evolved from varying interpretations of guidelines between states, past bias, precedence, or other reasons.

Collecting the data using new technologies will be very helpful for maintaining consistency in soil survey correlation activities, NASIS database development, and other special study efforts.

Continued on page 3

Love, continued from page 2



Figure 3.—Deluxe Palm package for WL15.

The new water-level loggers can be installed and then field checked once or twice per year. Using these electronic instruments saves staff time and dollars compared to traditional field checks. These loggers record water-level data continuously for more than 250 days. After the data has been recorded, it is download into a computer for complete analysis and the development of a graphic presentation that illustrates the movement of water through the soils.

The water loggers will be installed in key soils in Alabama, Florida, Georgia, Louisiana, Mississippi, Tennessee, and the Caribbean Area. This long-term study using new technologies will provide a good collection of sound water-table data for 10 years or more. Also, it will help in the development of the needed soil moisture status criteria for populating sound data into NASIS.

We hope to provide the assigned number of water-data

loggers to the states by the middle of August. It will take approximately 1-1/2 months for the shipment to arrive from the company.

This study is in conjunction with a study that is using the same type of electronic water-data loggers in MO-16. Special thanks go to our State Soil Scientists and our Cooperators for supporting this special study effort. State Soil Scientists and Cooperators, if you have any questions please contact George Martin, SDQS, or myself.

Remember! We need all the help we can get to populate good quality soils data into NASIS. ■

MO-15 will host a NEDS training course entitled "Correlation & Management of MLRA Soil Survey" in Auburn on September 8-12, 2003. This is an outstanding course for gaining an understanding of the management of an MLRA project office and other MLRA supporting activities. We look forward to visiting with and providing good accommodations for all participants and instructors.

About Me

By Amanda J. Zelasko

Editor's note: Amanda prepared this autobiographical article at the request of the MO leader. We are excited to have Amanda on board and wish her the best of luck!

Agriculture has been an important part of my life for many years. When I found out that I had been offered the student trainee position in Alexander City, Alabama, I was excited to accept. Growing up on a small farm just outside DuBois, Illinois, gave me the opportunity to enjoy farm life from the beginning. I always knew that I wanted to pursue a career in agriculture, but it was my high school agriculture class and the FFA that made me decide to study soil science. Through the FFA, I developed my public speaking skills, made many friends, and learned about all types of agricultural issues. I quickly found out that I most enjoyed attending the soil judging and public speaking career development events. My freshman year in college I was honored to serve on the Illinois State Officer Team as section 24 president. My experiences with FFA gave me the jump-start I needed to go to college and get involved in other organizations.

Currently, I am a junior at Southern Illinois University in Carbondale, Illinois, studying

Continued on page 4

Zelasko, continued from page 3

plant and soil science with a soil science specialization. When I started college, I received a scholarship through St. Louis Agribusiness club in conjunction with the AFA. The AFA, Agriculture Future of America, is a nationwide program that, similar to the FFA, encourages leadership, personal development, and career development. My involvement with the AFA encouraged me to apply for internships and improve my career skills.

Previously, I worked for the NRCS in Perry County, Illinois, as a summer intern. My experience in Perry County made me realize that I wanted to pursue a career with the NRCS. I also worked for CII Laboratories in Kansas City Missouri, and in the nematology department at SIUC. The chance for me to travel to Alabama was definitely one I did not want to pass up. I am thankful for the opportunity and am looking forward to the summer while staying in the beautiful state of Alabama. ■

MLRAs 122/128 Team

By Doug Clendenon, Soil Survey
Project Leader

The North Alabama Regional Soil Survey Office (NARSSO), located in Huntsville, Alabama, hosted a team meeting for MLRAs 122 and 128 on

February 25th and 26th, 2003. Those attending were Dr. Monday Mbila, assistant professor, Environmental Soil Science, Alabama A&M University; George Martin, soil data quality specialist (SDQS), MO-15; Harry Davis, SDQS, MO-18; John Jenkins, SDQS, MO-18; Jerry Prater, resource soil scientist, Sparta, Tennessee; Carlie McCowan, MLRA soil survey project leader (SSPL), Sparta, Tennessee; Gabe Krantz, SSPL, Sparta, Tennessee; Jennifer Parris, SSPL, Wartburg, Tennessee; Eddie Davis, Jr., Soil Scientist, NARSSO; and myself (fig. 4).

Both days were spent in the field sampling pedons for the newly proposed Limrock series. The Limrock series consists of very stony or bouldery soils that are moderately deep to bedrock, well drained, and slowly permeable. These soils

formed in material weathered from argillaceous limestone on the Cumberland Plateau escarpment, in the Appalachian Valley and Ridges, and on rocky outliers on the Highland Rim of Alabama and Tennessee. The field classification is clayey-skeletal, mixed, active, thermic Vertic Hapludalfs.

The National Soil Survey Laboratory in Lincoln, Nebraska, will characterize the samples. Dr. Warren Lynn, research soil scientist, Lincoln, Nebraska, is providing technical support for this project.

Despite the damp weather, the work was very successful and the camaraderie was super. We are looking forward to our next MLRA working meeting. Hopefully we can work with more soil scientists from Tennessee, Georgia, and Alabama. ■



Figure 4.—Participants at a team meeting for MLRAs 122 and 128. From left to right: Jennifer Parris; John Jenkins; Gabe Krantz; Carlie McCowan; Monday Mbila; Eddie Davis, Jr.; George Martin; Jerry Prater; and Harry Davis. (Present but not pictured: Doug Clendenon.)



Figure 5.—The participants at the 2003 Alabama work planning conference.

Alabama Hosts Work Planning Conference

by Julie A. Best, Public Affairs Specialist, Auburn, AL

Participants in the USDA Cooperative Soil Survey Program in Alabama gathered in Auburn March 11–12, 2003, for a work planning conference (fig. 5). Representatives from the three university segments (Auburn, Alabama A&M, and Tuskegee) participated along with other state and federal agencies and NRCS employees. State Conservationist Bob Jones welcomed the group to Alabama. He pledged his support for the soils program, indicated that his only regret is that there are not more soil scientists in the state, and stated that soil data is the basis for much of the work of NRCS.

Charles Love, State Soil Scientist, gave an overview of the Alabama soils program and listed his goals for the coming years:

- Establish four more MLRA offices by 2005,
- Update and maintain all soil survey NASIS data by 2007,
- Complete the once-over by 2009,
- Recompile all old and modern soil survey publications by 2006,
- Create a digital soil survey for all publications by 2007, and
- Continue to conduct special studies.

Other presentations focused on research and new technologies that would enhance the work of the soil survey program.

Alabama is one of the first states to appoint individuals to oversee quality assurance for

contract soil work. Five employees have completed the training and were recognized: Rick Zellmer, George Martin, Bobby Fox, Ken Johnson, and Milton Tuck. Other awards were presented to Scott Anderson and Sarah Walker for formatting material for the e-FOTG, to George Martin for updating the NASIS data, and to Aaron Achen for working with historical replicas and 508 compliance on the Web site.

Two common threads seemed to run through several presentations: The way that soil data is presented must change and the work of the soils program is never done, the need to gather and maintain data is ongoing.

The meeting combined a mix of the best: good food, good fun, and good fellowship while sharing ideas, needs, and concepts. ■

Two Update Teams Come Together for a Common Cause

By Warren Henderson, Florida State Soil Scientist

As the fiscal year swiftly moves along—with only about 4 months to go—the soil

survey update of Gadsden County, Florida, has gotten off the ground. Project Leader Bob Weatherspoon (fig. 6) recently had the opportunity to conduct an update in another county, where all of the fieldwork has been completed and only a few loose ends are left to be tied once the lab

data is received. The challenge for Bob and crew in Gadsden County is to continue their investigations with all the available resources and to meet and document the update mapping goal by September 30.

At the beginning of this fiscal year, we had planned to start

updates in two counties. Along came a competitive sourcing study, however, so the team members—Richard Ford, Project Leader Frank Watts, and Eddie Cummings—for one of the counties could not set foot in their county. So here they are.

After an early morning office

provides. His wide range of experience in these types of soils, landforms, and landscapes will definitely aid in the correlation of some of these ultisols.

The four additional soil scientists assisting in this update are David Howell, Andrew Williams, Jeff Allen, and Alfred Jones. We are

fortunate to have such an experienced group. The team is looking forward to using their wealth of knowledge and experience to produce a quality update that will serve the users of soils information for many decades. Unfortunately, within about three years most of the team will be

eligible for retirement. In fact, two are already in the club. This may be the last update survey for some of us. We'll be beating the bush, however, to find well-qualified soil scientists to carry the torch (auger) for some of the remaining updates if we win in the competitive sourcing arena. ■



Figure 6.—The combined team of soil scientists for the soil survey update of Gadsden County, Florida. From left to right: Richard Ford, Frank Watts, Eddie Cummings, Warren Henderson, Bob Weatherspoon, Alfred Jones, Jeff Allen, Andrew Williams, and David Howell. Picture taken near Quincy on May 21, 2003.

meeting, the team took a brief field tour to examine some of the soils that they had observed and to get feedback from the data quality specialist (Greg Brannon, MO-15, cameraman for figure 6). I appreciate all of the assistance that Greg

National Soil Judging Championship

By Joey Shaw, Assistant Professor of Soil Science, Auburn University

Auburn University's Soil Judging Team, composed of undergraduate students from the Agronomy and Soils Department, won the National Championship at Texas A&M University in April (fig. 7). Soil Judging evaluates the team's ability to describe, classify, and interpret soils in different settings. Auburn finished first out of the 22 teams whom had qualified for Nationals through regional competition and became the first South-eastern region team to win the championship in 14 years.

Individual performances included 1st place overall for Stan Usery (out of 88 individuals), 10th place for Bryan

Stone, 12th place for Christina van Santen, and 15th place for Deana Lasater. Ellen Knight and Brandon Dillard also contributed heavily to the win. For Stan Usery, the first place individual finish provided a capstone to a career in which he has also finished first and fifth in two regional soil judging contests. Christina van Santen and Deana Lasater also have a first and third place finish, respectively, from regional competition. This group has also won two regional championships over the last 2 years.

Following Auburn in second through fifth place were Cal-Poly, Ohio State

University, University of Wisconsin-Platteville, and the University of Georgia. This is Auburn's fifth National Soil Judging Championship; the first since 1986.

Editor's note: NRCS reaps benefits from what the team members have learned. Three team members will be working for NRCS in Alabama. Deana Lasater, a recent graduate, will be working in the Guntersville Field Office. Bryan Stone will be doing a summer internship in the Tuskegee Field Office, and Ellen Knight will be doing a summer internship in the Opelika Field Office. Thanks, Joey and students, for a job well done! ■



Figure 7.—Auburn University's Soil Judging Team, the National Champs.

Going Digital

By Rick Zellmer, GIS Specialist

While we may not have laptops or iPads to carry to the field, the process of mapping soils is beginning to change. With matching digital and hard-copy orthoimagery, it is easier than before to transfer penciled soil lines from the field sheet to a digital image using a mouse. I admit it isn't *that* easy, but it is doable and the completion of one survey and the beginning of another have shown the potential of going digital.

John Burns, soil survey project leader, has just completed the update of Houston County, Alabama. This was Alabama's first digital update (or more appropriately digital recompilation) of an existing digital soil survey based on extensive field investigations—that is, transects. Using ArcView, John was able to manipulate the existing data set to more accurately reflect the existing conditions and modern mapping conventions. Going from a scale of 1:15,840 to 1:24,000 dictated that the smaller polygons would be merged with an adjoining polygon, and going from pre-1968 photography to 1997 photography meant that land-use changes would have to be accounted for as they related to soils. Global changes, such as merging polygons of 4 acres or smaller with an adjoining polygon, were easily done in ArcView. Using an ArcView script, rules were set up that dictated how the polygons

would be merged. Splitting or modifying existing polygons and adding new polygons were also done in ArcView. Two big advantages of going digital were being able to use tools for cartographic checks, such as common soil lines, incorrect soil symbols, and missing soil symbols, and being able to make global changes to polygon attributes (the map unit symbols). John is currently assisting the Soil Survey Project Office in Coosa County in using ArcGIS to digitize completed quadrangles.

Christopher Ford, soil survey project leader in Bibb County, Alabama, has initiated Alabama's first, do-it-from-the-start soil survey with digital compilation. Christopher is penciling in the soil lines on the orthoimagery/topographic quadrangles in the field. Then in the office he is creating the digital product by using the mouse to digitize the soil lines with the orthoimage and topographic quadrangles in the background. ArcGIS allows him to make the topographic quadrangle semitransparent so the orthoimage can be seen underneath. Christopher has completed his first partial quadrangle and forwarded the file for review to the State Office in Auburn. There were a few lines that needed to be edited, but overall Christopher did an excellent job. The Duncanville Quadrangle is compiled!

Some states are already beginning to utilize 3-D Mapper and 10-meter digital elevation models (DEMs) to bring soils

digitizing into the 3-D realm. Going digital is not optional; it is a matter of how fast we make the transition. Is it frustrating? Just ask John or Christopher. There is no cookbook methodology for going digital, at least not yet. However, paraphrasing the immortal words of Bruce Stoneman, "There are an infinite number of ways to screw things up, but only a few ways to do a job correctly." ■

Editor's Note

Issues of this newsletter are available on the Internet on the MO-15 homepage (<http://www.mo15.nrcs.usda.gov/>). Click on "News" and then on "The Coastal Plainer."

You are invited to submit stories for future issues to Aaron Achen, editor, MO-15, Auburn, Alabama. Voice—(402) 437-4157; FAX—(402) 437-5336; e-mail—Aaron.Achen@nssc.nrcs.usda.gov.

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